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TECH CENTER 1600/2900

1600

RAW SEQUENCE LISTING

DATE: 07/28/2003

PATENT APPLICATION: US/09/723,752B

TIME: 09:47:07

Input Set : A:\P1093P1D1.txt

Output Set: N:\CRF4\07282003\I723752B.raw

SEQUENCE LISTING

W--> 3 SEQUENCE LISTING

5 (1) GENERAL INFORMATION:

7 (i) APPLICANT: Baca, Manuel

8 Wells, James A.

9 Presta, Leonard G.

10 Lowman, Henry B.

11 Chen, Yvonne M.

13 (ii) TITLE OF INVENTION: ANTI-VEGF ANTIBODIES

15 (iii) NUMBER OF SEQUENCES: 131

17 (iv) CORRESPONDENCE ADDRESS:

18 (A) ADDRESSEE: Genentech, Inc.

19 (B) STREET: 1 DNA Way

20 (C) CITY: South San Francisco

21 (D) STATE: California

22 (E) COUNTRY: USA

23 (F) ZIP: 94080

25 (v) COMPUTER READABLE FORM:

26 (A) MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk

27 (B) COMPUTER: IBM PC compatible

28 (C) OPERATING SYSTEM: PC-DOS/MS-DOS

29 (D) SOFTWARE: WinPatin (Genentech)

31 (vi) CURRENT APPLICATION DATA:

C--> 32 (A) APPLICATION NUMBER: US/09/723,752B

C--> 33 (B) FILING DATE: 27-Nov-2000

34 (C) CLASSIFICATION:

40 (vii) PRIOR APPLICATION DATA:

37 (A) APPLICATION NUMBER: 08/908469

38 (B) FILING DATE: 06-AUG-1997

41 (A) APPLICATION NUMBER: 08/833504

42 (B) FILING DATE: 07-APR-1997

44 (viii) ATTORNEY/AGENT INFORMATION:

45 (A) NAME: Cui, Steven X.

46 (B) REGISTRATION NUMBER: 44,637

47 (C) REFERENCE/DOCKET NUMBER: P1093P1D1

49 (ix) TELECOMMUNICATION INFORMATION:

50 (A) TELEPHONE: 650/225-8674

51 (B) TELEFAX: 650/952-9881

52 (2) INFORMATION FOR SEQ ID NO: 1:

54 (i) SEQUENCE CHARACTERISTICS:

55 (A) LENGTH: 10 amino acids

56 (B) TYPE: Amino Acid

57 (D) TOPOLOGY: Linear

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```

59      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
61  Gly Tyr Thr Phe Thr Asn Tyr Gly Met Asn
62      1          5          10
64 (2) INFORMATION FOR SEQ ID NO: 2:
66      (i) SEQUENCE CHARACTERISTICS:
67          (A) LENGTH: 17 amino acids
68          (B) TYPE: Amino Acid
69          (D) TOPOLOGY: Linear
71      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
73  Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr Ala Ala Asp Phe
74      1          5          10          15
76  Lys Arg
79 (2) INFORMATION FOR SEQ ID NO: 3:
81      (i) SEQUENCE CHARACTERISTICS:
82          (A) LENGTH: 14 amino acids
83          (B) TYPE: Amino Acid
84          (D) TOPOLOGY: Linear
86      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
88  Tyr Pro His Tyr Tyr Gly Ser Ser His Trp Tyr Phe Asp Val
89      1          5          10
91 (2) INFORMATION FOR SEQ ID NO: 4:
93      (i) SEQUENCE CHARACTERISTICS:
94          (A) LENGTH: 11 amino acids
95          (B) TYPE: Amino Acid
96          (D) TOPOLOGY: Linear
98      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
100 Ser Ala Ser Gln Asp Ile Ser Asn Tyr Leu Asn
101      1          5          10
103 (2) INFORMATION FOR SEQ ID NO: 5:
105      (i) SEQUENCE CHARACTERISTICS:
106          (A) LENGTH: 7 amino acids
107          (B) TYPE: Amino Acid
108          (D) TOPOLOGY: Linear
110      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
112 Phe Thr Ser Ser Leu His Ser
113      1          5
115 (2) INFORMATION FOR SEQ ID NO: 6:
117      (i) SEQUENCE CHARACTERISTICS:
118          (A) LENGTH: 9 amino acids
119          (B) TYPE: Amino Acid
120          (D) TOPOLOGY: Linear
122      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
124 Gln Gln Tyr Ser Thr Val Pro Trp Thr
125      1          5
127 (2) INFORMATION FOR SEQ ID NO: 7:
129      (i) SEQUENCE CHARACTERISTICS:
130          (A) LENGTH: 118 amino acids
131          (B) TYPE: Amino Acid
132          (D) TOPOLOGY: Linear

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134 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:

136	Glu	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Leu	Val	Gln	Pro	Gly
137	1			5						10					15
139	Gly	Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Tyr	Thr	Phe	Thr
140				20						25					30
142	Asn	Tyr	Gly	Met	Asn	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu
143				35						40					45
145	Glu	Trp	Val	Gly	Trp	Ile	Asn	Thr	Tyr	Thr	Gly	Glu	Pro	Thr	Tyr
146				50						55					60
148	Ala	Ala	Asp	Phe	Lys	Arg	Arg	Phe	Thr	Phe	Ser	Leu	Asp	Thr	Ser
149				65						70					75
151	Lys	Ser	Thr	Ala	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp
152				80						85					90
154	Thr	Ala	Val	Tyr	Tyr	Cys	Ala	Lys	Tyr	Pro	His	Tyr	Tyr	Gly	Ser
155				95						100					105
157	Ser	His	Trp	Tyr	Phe	Asp	Val	Trp	Gly	Gln	Gly	Thr	Leu		
158				110						115					

160 (2) INFORMATION FOR SEQ ID NO: 8:

162 (i) SEQUENCE CHARACTERISTICS:

163 (A) LENGTH: 110 amino acids

164 (B) TYPE: Amino Acid

165 (D) TOPOLOGY: Linear

167 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:

169	Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val
170	1			5						10					15
172	Gly	Asp	Arg	Val	Thr	Ile	Thr	Cys	Ser	Ala	Ser	Gln	Asp	Ile	Ser
173				20						25					30
175	Asn	Tyr	Leu	Asn	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys
176				35						40					45
178	Val	Leu	Ile	Tyr	Phe	Thr	Ser	Ser	Leu	His	Ser	Gly	Val	Pro	Ser
179				50						55					60
181	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Thr	Ile
182				65						70					75
184	Ser	Ser	Leu	Gln	Pro	Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Gln	Gln
185				80						85					90
187	Tyr	Ser	Thr	Val	Pro	Trp	Thr	Phe	Gly	Gln	Gly	Thr	Lys	Val	Glu
188				95						100					105
190	Ile	Lys	Arg	Thr	Val										
191				110											

193 (2) INFORMATION FOR SEQ ID NO: 9:

195 (i) SEQUENCE CHARACTERISTICS:

196 (A) LENGTH: 123 amino acids

197 (B) TYPE: Amino Acid

198 (D) TOPOLOGY: Linear

200 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:

202	Glu	Ile	Gln	Leu	Val	Gln	Ser	Gly	Pro	Glu	Leu	Lys	Gln	Pro	Gly
203	1			5						10					15
205	Glu	Thr	Val	Arg	Ile	Ser	Cys	Lys	Ala	Ser	Gly	Tyr	Thr	Phe	Thr
206				20						25					30

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208 Asn Tyr Gly Met Asn Trp Val Lys Gln Ala Pro Gly Lys Gly Leu
209                      35                      40                      45
211 Lys Trp Met Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr
212                      50                      55                      60
214 Ala Ala Asp Phe Lys Arg Arg Phe Thr Phe Ser Leu Glu Thr Ser
215                      65                      70                      75
217 Ala Ser Thr Ala Tyr Leu Gln Ile Ser Asn Leu Lys Asn Asp Asp
218                      80                      85                      90
220 Thr Ala Thr Tyr Phe Cys Ala Lys Tyr Pro His Tyr Tyr Gly Ser
221                      95                     100                     105
223 Ser His Trp Tyr Phe Asp Val Trp Gly Ala Gly Thr Thr Val Thr
224                      110                     115                     120

```

226 Val Ser Ser

229 (2) INFORMATION FOR SEQ ID NO: 10:

231 (i) SEQUENCE CHARACTERISTICS:

232 (A) LENGTH: 108 amino acids

233 (B) TYPE: Amino Acid

234 (D) TOPOLOGY: Linear

236 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:

```

238 Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu
239 1                      5                      10                      15
241 Gly Asp Arg Val Ile Ile Ser Cys Ser Ala Ser Gln Asp Ile Ser
242                      20                      25                      30
244 Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys
245                      35                      40                      45
247 Val Leu Ile Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser
248                      50                      55                      60
250 Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile
251                      65                      70                      75
253 Ser Asn Leu Glu Pro Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln
254                      80                      85                      90
256 Tyr Ser Thr Val Pro Trp Thr Phe Gly Gly Gly Thr Lys Leu Glu
257                      95                     100                     105
259 Ile Lys Arg

```

262 (2) INFORMATION FOR SEQ ID NO: 11:

264 (i) SEQUENCE CHARACTERISTICS:

265 (A) LENGTH: 113 amino acids

266 (B) TYPE: Amino Acid

267 (D) TOPOLOGY: Linear

269 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:

```

271 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
272 1                      5                      10                      15
274 Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser
275                      20                      25                      30
277 Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
278                      35                      40                      45
280 Glu Trp Val Ser Val Ile Ser Gly Asp Gly Gly Ser Thr Tyr Tyr
281                      50                      55                      60
283 Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser

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```

284          65          70          75
286 Lys Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
287          80          85          90
289 Thr Ala Val Tyr Tyr Cys Ala Arg Gly Phe Asp Tyr Trp Gly Gln
290          95         100         105
292 Gly Thr Leu Val Thr Val Ser Ser
293          110
295 (2) INFORMATION FOR SEQ ID NO: 12:
297   (i) SEQUENCE CHARACTERISTICS:
298       (A) LENGTH: 108 amino acids
299       (B) TYPE: Amino Acid
300       (D) TOPOLOGY: Linear
302   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
304 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
305   1          5          10         15
307 Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser
308          20         25         30
310 Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
311          35         40         45
313 Leu Leu Ile Tyr Ala Ala Ser Ser Leu Glu Ser Gly Val Pro Ser
314          50         55         60
316 Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
317          65         70         75
319 Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln
320          80         85         90
322 Tyr Asn Ser Leu Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu
323          95        100        105
325 Ile Lys Arg
328 (2) INFORMATION FOR SEQ ID NO: 13:
330   (i) SEQUENCE CHARACTERISTICS:
331       (A) LENGTH: 107 amino acids
332       (B) TYPE: Amino Acid
333       (D) TOPOLOGY: Linear
335   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
337 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
338   1          5          10         15
340 Gly Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser
341          20         25         30
343 Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
344          35         40         45
346 Leu Leu Ile Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser
347          50         55         60
349 Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
350          65         70         75
352 Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln
353          80         85         90
355 Tyr Ser Thr Val Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu
356          95        100        105
358 Ile Lys

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